

1. **(Currently Amended)** A clamp for automated welding installations for holding two or more sheets to be handled during welding, said clamp comprising a body, a fixed arm and a mobile arm adapted to hold said two or more sheets, a pneumatic cylinder for activating said mobile arm of the clamp, said body being in the form of a central tubular element ~~surrounding~~ enclosing said pneumatic cylinder, ~~said body and~~ having two opposing lateral plates welded to one end thereof, said mobile arm being mounted for pivotal movement by said plates at the ~~centre~~ center of the clamp between said lateral plates.
2. **(Previously Amended)** Clamp for automated welding installations, according to claim 1, wherein said central tubular element is constituted from a tube with lateral millings at said one end so as to support said opposing lateral plates, said plates being joined to the tubular element by welding.
3. **(Previously Amended)** Clamp for automated welding installations, according to claim 1, characterized by the opposing lateral plates of the body of the clamp being constituted by steel.
4. **(Previously Amended)** Clamp for automated welding installations, according to claim 3, wherein said opposing lateral plates of the body of the clamp have openings within their perimeters, said perimeters and openings being defined by laser-beam machining.
5. **(Previously Amended)** Clamp for automated welding installations, according to claim 1, having a fixed transverse pivot shaft mounted between said opposing lateral plates, and an activation roller operable to be displaced by said mobile arm of the clamp on said shaft, wherein said opposing lateral plates of the body of the clamp have lightening openings, orifices for mounting the ends of the pivot shaft of the mobile arm of the clamp and elongated holes for guiding said activation roller for displacing the mobile arm of the clamp.

6. **(Currently Amended)** Clamp for automated welding installations, according to claim 1, wherein said body has ~~a pneumatic cylinder for activating the clamp~~, a piston rod with a drive rod at its free end and an activation roller on said drive rod for pivoting said mobile arm, and wherein said mobile arm of the clamp is mounted for pivoting on a fixed pivot shaft between said plates, and takes an L-shaped position and presents on its internal end an elongated hole that causes the arm to pivot on said pivot shaft, said mobile arm being disposed between said opposing lateral plates, said elongated hole adapted to receive said activation roller, said elongated hole of the arm having a straight inferior area and a gently curved upper area to cause the progressive variation of the angle of incidence between the drive rod ~~transverse shaft~~ pivoting the mobile arm and the elongated hole of said mobile arm, whereby the straight area provides an irreversibility area on triggering.

7. **(Previously Amended)** Clamp for automated welding installations, according to claim 1, including a fitted metal band covering the gap between said two lateral plates on its free lower and rear part, said metal band being provided with a longitudinal opening in which the mobile arm of the clamp passes, said mobile arm including a second metal band, shorter than said fitted metal band confronting the internal side of said fitted metal band adapted to at least partially close said longitudinal opening during pivotal movement of the mobile arm.

8. **(Previously Amended)** Clamp for automated welding installations, according to claim 1, wherein said pneumatic cylinder has upper and lower fixed covers, a cylindrical casing joined to these upper and lower covers to seal the cylinder, said casing being slightly spaced from the internal side of said tubular element to provide a spacing providing a passage for air connecting the upper with the lower parts of the cylinder, said pneumatic cylinder having a piston and a piston rod having an extension for activating said mobile arm.

9. **(Previously Amended)** Clamp for automated welding installations, according to claim 8, including a bolt with a top head extending above said piston, said upper cover of the pneumatic cylinder having a central receptacle adapted to receive said top head of the bolt in the upper limit position of the piston.

10. **(Currently Amended)** Clamp for automated welding installations, according to claim 9, wherein said receptacle has an air outlet with restricted and adjustable flow to provide a pneumatic ~~shack~~ shock absorber effect.

11. **(Currently Amended)** Clamp for automated welding installations, according to claim 8, including an orifice in said upper cover admitting air into ~~said~~ said spacing between the cylinder casing and the tubular element of the body.

12. **(Canceled)**

13. **(Previously Amended)** Clamp for automated welding installations, according to claim 1 including a sensor housing that detects the angular pivotal position of the mobile arm, and means mounting said housing on the rear side of the clamp.

14. **(Canceled)**

15. **(Previously Amended)** Clamp for automated welding installations, according to claim 1, including a bracket at the end of the body opposite to said one end, said bracket adapted to fasten the clamp to a grip or a welding tool including a cut-out on the bracket having a shoulder adapted to fit with a corner at the top edge of the tubular body of the clamp.

16. **(Previously Amended)** Clamp for automated welding installations, according to claim 1, wherein said lateral plates have openings, and including covers for said openings, said covers being coextensive with the external sides of said plates.

17. **(Previously Amended)** Clamp for automated welding installations, according to claim 1, including a mounting unit for setting-up of said tubular body at the lower part of said body, and, at the upper part of said body, said lateral plates having openings and defining a wide transverse recess open at the top in order to mount said mobile arm, said lateral plates having orifices for fastening screws, said transverse recess at the top having cover elements closing the upper part of the clamp itself in order to prevent welding splashes and other scraps from going in.

18. (Canceled)

19. (Currently Amended) A clamp for automated welding installations comprising a body and at least two arms adapted to be used to hold two or more sheets to be handled during welding, at least one of said arms being mobile and mounted for pivotal movement, and a pneumatic cylinder for activating said at least one mobile arm, wherein

said body has a central tubular element with two opposing lateral plates at welded to the lower part thereof, and a fixed pivot shaft supported by said plates to support said at least one mobile arm for said pivotal movement, said mobile arm being disposed at the center of the clamp between the lateral plates,

said central tubular element ~~housing~~ enclosing said pneumatic cylinder, said cylinder having a piston, a piston rod, and an extension at its free end with an activation roller engaging a said mobile arm and operable to effect pivotal movement of said mobile arm on said fixed pivot shaft .